

NOTICE OF HEARING

COMMITTEE ON ENERGY AND NATURAL
RESOURCES

Mr. BINGAMAN. Mr. President, I would like to announce for the information of the Senate and the public that a hearing has been scheduled before the Committee on Energy and Natural Resources.

The hearing will take place on Thursday, June 14, 2001, at 9:30 a.m., in room SD-106 of the Dirksen Senate Office Building in Washington, DC.

The purpose of the hearing is to receive testimony on potential problems in the gasoline markets this summer.

Those wishing to submit written statements should address them to the Committee on Energy and Natural Resources, U.S. Senate, Washington, DC 20510-6150.

For further information, please contact Shirley Neff at (202) 224-4103.

AUTHORITY FOR COMMITTEES TO
MEET

SUBCOMMITTEE ON SEAPOWER

Mr. KENNEDY. Mr. President, I ask unanimous consent that the Subcommittee on Seapower of the Committee on Armed Services be authorized to meet during the session of the Senate on Thursday, June 7, 2001, at 2:00 p.m., in open session to receive testimony regarding Navy and Marine Corps equipment for 21st century operational requirements, in review of the defense authorization request for fiscal year 2002 and the Future Years Defense Program.

The PRESIDING Officer. Without objection, it is so ordered.

APPOINTMENTS

The PRESIDING OFFICER. The Chair, on behalf of the President pro tempore, upon the recommendation of the majority leader, pursuant to Public Law 105-292, as amended by Public Law 106-55, appoints the following individuals to the United States Commission on International Religious Freedom: Dr. Firuz Kazemzadeh of California, vice John Bolton, and Charles Richard Stith of Massachusetts, vice Theodore Cardinal McCarrick.

TECHNOLOGY, EDUCATION AND
COPYRIGHT HARMONIZATION
ACT OF 2001

Mr. REID. Madam President, I ask unanimous consent that the Senate now proceed to the consideration of Calendar No. 66, S. 487.

The PRESIDING OFFICER. The clerk will report the bill by title.

The legislative clerk read as follows:

A bill (S. 487) to amend chapter 1 of title 17, United States Code, relating to the exemption of certain performances or displays for educational uses from copyright infringe-

ment provisions, to provide that the making of a single copy of such performances or displays is not an infringement, and for other purposes.

There being no objection, the Senate proceeded to consider the bill, which has been reported from the Committee on the Judiciary with an amendment to strike all after the enacting clause and insert the part printed in italic.

SECTION 1. EDUCATIONAL USE COPYRIGHT EX-
EMPTION.

(a) *SHORT TITLE.*—This Act may be cited as the “Technology, Education, and Copyright Harmonization Act of 2001”.

(b) *EXEMPTION OF CERTAIN PERFORMANCES AND DISPLAYS FOR EDUCATIONAL USES.*—Section 110 of title 17, United States Code, is amended—

(1) by striking paragraph (2) and inserting the following:

“(2) except with respect to a work produced or marketed primarily for performance or display as part of mediated instructional activities transmitted via digital networks, or a performance or display that is given by means of a copy or phonorecord that is not lawfully made and acquired under this title, and the transmitting government body or accredited nonprofit educational institution knew or had reason to believe was not lawfully made and acquired, the performance of a nondramatic literary or musical work or reasonable and limited portions of any other work, or display of a work in an amount comparable to that which is typically displayed in the course of a live classroom session, by or in the course of a transmission, if—

“(A) the performance or display is made by, at the direction of, or under the actual supervision of an instructor as an integral part of a class session offered as a regular part of the systematic mediated instructional activities of a governmental body or an accredited nonprofit educational institution;

“(B) the performance or display is directly related and of material assistance to the teaching content of the transmission;

“(C) the transmission is made solely for, and, to the extent technologically feasible, the reception of such transmission is limited to—

“(i) students officially enrolled in the course for which the transmission is made; or

“(ii) officers or employees of governmental bodies as a part of their official duties or employment; and

“(D) the transmitting body or institution—

“(i) institutes policies regarding copyright, provides informational materials to faculty, students, and relevant staff members that accurately describe, and promote compliance with, the laws of the United States relating to copyright, and provides notice to students that materials used in connection with the course may be subject to copyright protection; and

“(ii) in the case of digital transmissions—

“(I) applies technological measures that, in the ordinary course of their operations, prevent—

“(aa) retention of the work in accessible form by recipients of the transmission from the transmitting body or institution for longer than the class session; and

“(bb) unauthorized further dissemination of the work in accessible form by such recipients to others; and

“(II) does not engage in conduct that could reasonably be expected to interfere with technological measures used by copyright owners to prevent such retention or unauthorized further dissemination;”;

(2) by adding at the end the following:

“‘In paragraph (2), the term ‘mediated instructional activities’ with respect to the performance or display of a work by digital transmission

under this section refers to activities that use such work as an integral part of the class experience, controlled by or under the actual supervision of the instructor and analogous to the type of performance or display that would take place in a live classroom setting. The term does not refer to activities that use, in 1 or more class sessions of a single course, such works as textbooks, course packs, or other material in any media, copies or phonorecords of which are typically purchased or acquired by the students in higher education for their independent use and retention or are typically purchased or acquired for elementary and secondary students for their possession and independent use.

“For purposes of paragraph (2), accreditation—

“(A) with respect to an institution providing post-secondary education, shall be as determined by a regional or national accrediting agency recognized by the Council on Higher Education Accreditation or the United States Department of Education; and

“(B) with respect to an institution providing elementary or secondary education, shall be as recognized by the applicable state certification or licensing procedures.

“For purposes of paragraph (2), no governmental body or accredited nonprofit educational institution shall be liable for infringement by reason of the transient or temporary storage of material carried out through the automatic technical process of a digital transmission of the performance or display of that material as authorized under paragraph (2). No such material stored on the system or network controlled or operated by the transmitting body or institution under this paragraph shall be maintained on such system or network in a manner ordinarily accessible to anyone other than anticipated recipients. No such copy shall be maintained on the system or network in a manner ordinarily accessible to such anticipated recipients for a longer period than is reasonably necessary to facilitate the transmissions for which it was made.”.

(c) *EPHEMERAL RECORDINGS.*—

(1) *IN GENERAL.*—Section 112 of title 17, United States Code, is amended—

(A) by redesignating subsection (f) as subsection (g); and

(B) by inserting after subsection (e) the following:

“(f)(1) Notwithstanding the provisions of section 106, and without limiting the application of subsection (b), it is not an infringement of copyright for a governmental body or other nonprofit educational institution entitled under section 110(2) to transmit a performance or display to make copies or phonorecords of a work that is in digital form and, solely to the extent permitted in paragraph (2), of a work that is in analog form, embodying the performance or display to be used for making transmissions authorized under section 110(2), if—

“(A) such copies or phonorecords are retained and used solely by the body or institution that made them, and no further copies or phonorecords are reproduced from them, except as authorized under section 110(2); and

“(B) such copies or phonorecords are used solely for transmissions authorized under section 110(2).

“(2) This subsection does not authorize the conversion of print or other analog versions of works into digital formats, except that such conversion is permitted hereunder, only with respect to the amount of such works authorized to be performed or displayed under section 110(2), if—

“(A) no digital version of the work is available to the institution; or

“(B) the digital version of the work that is available to the institution is subject to technological protection measures that prevent its use for section 110(2).”.

(2) *TECHNICAL AND CONFORMING AMENDMENT.*—Section 802(c) of title 17, United States Code, is amended in the third sentence by striking “section 112(f)” and inserting “section 112(g)”.

(d) *PATENT AND TRADEMARK OFFICE REPORT.*—

(1) *IN GENERAL.*—Not later than 180 days after the date of enactment of this Act and after a period for public comment, the Undersecretary of Commerce for Intellectual Property, after consultation with the Register of Copyrights, shall submit to the Committees on the Judiciary of the Senate and the House of Representatives a report describing technological protection systems that have been implemented, are available for implementation, or are proposed to be developed to protect digitized copyrighted works and prevent infringement, including upgradeable and self-repairing systems, and systems that have been developed, are being developed, or are proposed to be developed in private voluntary industry-led entities through an open broad based consensus process. The report submitted to the Committees shall not include any recommendations, comparisons, or comparative assessments of any commercially available products that may be mentioned in the report.

(2) *LIMITATIONS.*—The report under this subsection—

(A) is intended solely to provide information to Congress; and

(B) shall not be construed to affect in any way, either directly or by implication, any provision of title 17, United States Code, including the requirements of clause (ii) of section 110(2)(D) of that title (as added by this Act), or the interpretation or application of such provisions, including evaluation of the compliance with that clause by any governmental body or nonprofit educational institution.

Mr. LEAHY. Madam President. I am pleased that the Senate is considering the TEACH Act, S. 487, today. This legislation will help clarify the law and allow educators to use the same rich material in distance learning over the Internet that they are able to use in face-to-face classroom instruction. The Senate has been focused on education reform for the past two months. The legislation we report today reflects our understanding that we must be able to use new technologies to advance our education goals in a manner that recognizes and protects copyrighted works.

The genesis of this bill was in the Digital Millennium Copyright Act (DMCA), where we asked the Copyright Office to study the complex copyright issues involved in distance education and to make recommendations to us for any legislative changes. The Copyright Office released its report in May, 1999, and made valuable suggestions on how modest changes in our copyright law could go a long way to foster the appropriate use of copyrighted works in valid distance learning activities. Senator HATCH and I then introduced the TEACH Act, S. 487, relying heavily on the legislative recommendations of that report.

Marybeth Peters, the Registrar of Copyrights, and her staff deserve our heartfelt thanks for that comprehensive study and their work on this legislation.

At the March 13, 2001, hearing on this legislation, we heard from people who both supported the legislation and had concerns about it. I appreciate that some copyright owners disagreed with the Copyright Office's conclusions and believed instead that current copyright laws are adequate to enable and foster legitimate distance learning activities. We have made efforts in refining the original legislation to address the valid concerns of both the copyright owners and the educational community. This has not been an easy process and I want to extend my thanks to all of those who worked hard and with us to craft the legislation reported by the Judiciary Committee and considered by the Senate today.

The growth of distance learning is exploding, largely because it is responsive to the needs of older, non-traditional students. The Copyright Office, “CO,” report noted two years ago that, by 2002, the number of students taking distance education courses will represent 15 percent of all higher education students. Moreover, the typical average distance learning student is 34 years old, employed full-time and has previous college credit. More than half are women. In increasing numbers, students in other countries are benefitting from educational opportunities here through U.S. distance education programs. (CO Report, at pp. 19–20).

In high schools, distance education makes advanced college placement and college equivalency courses available—a great opportunity for residents in our more-rural states. In colleges, distance education makes lifelong learning a practical reality.

Not only does distance education make it more convenient for many students to pursue an education, for students who have full-time work commitments, who live in rural areas or in foreign countries, who have difficulty obtaining child or elder care, or who have physical disabilities, distance education may be the only means for them to pursue an education. These are the people with busy schedules who need the flexibility that on-line programs offer: virtual classrooms accessible when the student is ready to log on.

In rural areas, distance education provides an opportunity for schools to offer courses that their students might otherwise not be able to enjoy. It is therefore no surprise that in Vermont, and many other rural states, distance learning is a critical component of any quality educational and economic development system. The most recent Vermont Telecommunications Plan, which was published in 1999, identifies distance learning as being critical to Vermont's development. It also recommends that Vermont consider “using its purchasing power to accelerate the introduction of new [distance learning] services in Vermont.” Tech-

nology has empowered individuals in the most remote communities to have access to the knowledge and skills necessary to improve their education and ensure they are competitive for jobs in the 21st Century.

Several years ago, I was proud to work with the state in establishing the Vermont Interactive Television network. This constant two-way videoconferencing system can reach communities, schools and businesses in every corner of the state. Since we first successfully secured funds to build the backbone of the system, Vermont has constructed fourteen sites. The VIT system is currently running at full capacity and has demonstrated that in Vermont, technology highways are just as important as our transportation highways.

No one single technology should be the platform for distance learning. In Vermont, creative uses of available resources have put in place a distance learning system that employs T-1 lines in some areas and traditional internet modem hook-ups in others. Several years ago, the Grand Isle Supervisory Union received a grant from the U.S. Department of Agriculture to link all the schools within the district with fiber optic cable. There are not a lot of students in this Supervisory Union but there is a lot of land separating one school from another. The bandwidth created by the fiber optic cables has not only improved the educational opportunities in the four Grand Isle towns, but it has also provided a vital economic boost to the area's businesses.

While there are wonderful examples of the use of distance learning inside Vermont, the opportunities provided by these technologies are not limited to the borders of one state, or even one country. Champlain College, a small school in Burlington, Vermont has shown this is true when it adopted a strategic plan to provide distance learning for students throughout the world. Under the leadership of President Roger Perry, Champlain College now has more students enrolled than any other college in Vermont. The campus in Vermont has not been overwhelmed with the increase. Instead, Champlain now teaches a large number of students overseas through its on-line curriculum. Similarly, Marlboro College in Marlboro, Vermont, offers innovative graduate programs designed for working professionals with classes that meet not only in person but also on-line.

The Internet, with its interactive, multi-media capabilities, has been a significant development for distance learning. By contrast to the traditional, passive approach of distance learning where a student located remotely from a classroom was able to watch a lecture being broadcast at a fixed time over the air, distance learners today can participate in real-time

class discussions, or in simultaneous multimedia projects. The Copyright Office report confirmed what I have assumed for some time—that “the computer is the most versatile of distance education instruments,” not just in terms of flexible schedules, but also in terms of the material available.

More than 20 years ago, the Congress recognized the potential of broadcast and cable technology to supplement classroom teaching, and to bring the classroom to those who, because of their disabilities or other special circumstances, are unable to attend classes. We included in the present Copyright Act certain exemptions for distance learning, in addition to the general fair use exemption. The time has come to do more. The recent report of the Web-Based Education Commission, headed by former Senator Bob Kerrey, says:

Current copyright law governing distance education . . . was based on broadcast models of telecommunications for distance education. That law was not established with the virtual classroom in mind, nor does it resolve emerging issues of multimedia online, or provide a framework for permitting digital transmissions.

The Kerrey report concluded that our copyright laws were “inappropriately restrictive.” (p. 97).

Under current law, the performance or display of any work in the course of face-to-face instruction in a classroom is exempt from the exclusive rights of a copyright owner. In addition, the copyright law allows transmissions of certain performances or displays of copyrighted works but restricts such transmissions subject to the exemption to those sent to a classroom or a similar place which is normally devoted to instruction, to persons whose disabilities or other special circumstances prevent classroom attendance, or to government employees. While this exemption is technology neutral and does not limit exempt “transmissions” to distance learning broadcasts, the exemption does not authorize the reproduction or distribution of copyrighted works a limitation that has enormous implications for transmissions over computer networks. Digital transmissions over computer networks involve multiple acts of reproduction as a data packet is moved from one computer to another.

The TEACH Act makes three significant expansions in the distance learning exemption in the Copyright Act, while minimizing the additional risks to copyright owners that are inherent in exploiting works in a digital format. First, the bill eliminates the current eligibility requirements for the distance learning exemption that the instruction occur in a physical classroom or that special circumstances prevent the attendance of students in the classroom. At the same time, the bill would maintain and clarify the requirement that the exemption is limited to use in

mediated instructional activities of governmental bodies and accredited non-profit educational institutions.

Second, the bill clarifies that the distance learning exemption covers the transient or temporary copies that may occur through the automatic technical process of transmitting material over the Internet.

Third, the current distance learning exemption only permits the transmission of the performance of “non-dramatic literary or musical works,” but does not allow the transmission of movies or videotapes, or the performance of plays. The Kerrey Commission report cited this limitation as an obstacle to distance learning in current copyright law and noted the following examples: A music instructor may play songs and other pieces of music in a classroom, but must seek permission from copyright holders in order to incorporate these works into an online version of the same class. A children’s literature instructor may routinely display illustrations from children’s books in the classroom, but must get licenses for each one for on online version of the course.

To alleviate this disparity, the TEACH Act would amend current law to allow educators to show reasonable and limited portions of dramatic literary and musical works, audiovisual works, and sound recordings, in addition to the complete versions of non-dramatic literary and musical works which are currently exempted.

This legislation is a balanced proposal that expands the educational use exemption in the copyright law for distance learning, but also contains a number of safeguards for copyright owners. In particular, the bill excludes from the exemption those works that are produced primarily for instructional use, because for such works, unlike entertainment products or materials of a general educational nature, the exemption could significantly cut into primary markets, impairing incentives to create. Indeed, the Web-Based Education Commission urged the development of “high quality online educational content that meets the highest standards of educational excellence.” Copyright protection can help provide the incentive for the development of such content.

In addition, the bill requires that the government or educational institution using the exemption transmit copyrighted works that are lawfully made or acquired and use technological protection safeguards to protect against retention of the work and ensure that the dissemination of material covered under the exemption is limited only to the students who are intended to receive it.

Finally, the bill directs the Patent and Trademark Office to report to the Congress with a description of the various technological protection systems

in use, available, or being developed to protect digitized copyrighted works and prevent infringement, including those being developed in private, voluntary, industry-led entities through an open broad based consensus process. The original version of this study proposed by Senator HATCH in an amendment filed to the Elementary and Secondary Education bill, S. 1, proved highly controversial.

I appreciate that copyright owners are frustrated at the pace at which technological measures are being developed and implemented to protect digital copyrighted works, particularly as high-speed Internet connections and broadband service becomes more readily available. At the same time, computer and software manufacturers and providers of Internet services are appropriately opposed to the government mandating use of a particular technological protection measure or setting the specification standards for such measures. Indeed, copyright owners are a diverse group, and some owners may want more flexibility and variety in the technical protection measures available for their works than would result if the government intervened too soon and mandated a particular standard or system. I am glad that with the constructive assistance of Senator CANTWELL and other members of the Judiciary Committee, we were able to include a version of the PTO study in the bill that is limited to providing information to the Congress.

Distance education is an important issue to both Senator Hatch and to me, and to the people of all of our States. This is a good bill and I urge the Congress to act promptly to see this legislation enacted.

Mr. HATCH. Madam President, I am pleased that we will pass out of the Senate today S. 487, the “Technology Education and Copyright Harmonization Act” or fittingly abbreviated as the “TEACH Act,” which updates the educational use provisions of the copyright law to account for advancements in digital transmission technologies that support distance learning.

But first I want to thank the Ranking Member for his work and partnership on this legislation. We have done it in a bipartisan, consensus-building manner. I would also like to thank the various representatives of the copyright owner and education communities who have worked so hard with us to achieve this consensus and move this legislation forward.

They have worked in the spirit of cooperation toward the shared goal of helping our students learn better through technology and the media. I would also like to thank the Register of Copyrights, and her staff at the Copyright Office, for their help and technical assistance. They have done an admirable job in helping us move forward the deployment of the Internet

and digital transmissions systems in education.

Because of their hard work, I am confident we have an important education reform that can be sent to, and signed by, the President with broad, bipartisan support in the coming month.

Distance education, and the use of high technology tools such as the Internet in education, hold great promise for students in States like Utah, where distances can be great between students and learning opportunities. I think it is similarly important for any State that has students who seek broader learning opportunities than they can reach in their local area. Any education reforms moved in the Congress this year should include provisions that help deploy high technology tools, including the Internet, to give our students the very best educational experience we can offer. I believe this legislation is an important part of truly effective education reform that can open up new vistas to all our students, while potentially costing less in the long run to provide a full education experience.

By using these tools, students in remote areas of my home State of Utah are becoming able to link up to resources previously available only to those in cities or at prestigious educational institutions. Limited access to language instructors in remote areas or particle accelerators in most high schools limit access to educational opportunity. These limits can be overcome to a revolutionary degree by online offerings, which can combine sound, video, and interactivity in exciting new ways. And new experiences that transcend what is possible in the classroom, such as hypertexts linked directly to secondary sources, are possible only in the online world.

With the advent of the Internet and other communication technologies, classrooms need no longer be tied to a specific location or time. As exciting as distance education is, online education will only thrive if teachers and students have affordable and convenient access to the highest quality educational materials. The goal of the TEACH Act is to update the educational provisions of the copyright law for the 21st century, allowing students and teachers to benefit from deployment of advanced digital technologies.

Specifically, the TEACH Act amends sections 110(2) and 112 of the Copyright Act to facilitate the growth and development of digital distance learning. First, the legislation expands the scope of the section 110(2) exemption to apply to performances and displays of all categories of copyrighted works subject to reasonable limitations on the portion or amount of the work that can be digitally transmitted. Thus, for example, the Act allows transmissions to locations other than the physical class-

room, and includes audiovisual works, sound recordings and other works within the exemption. At the same time, the bill maintains and clarifies the concept of "mediated instructional activities," which requires that the performance or display be analogous to the type of performance or display that would take place in a live classroom setting.

Moreover, of utmost significance to the copyright owners, the legislation adds new safeguards to counteract the risks posed by digital transmissions in an educational setting. For example, the bill imposes obligations to implement technological protection measures as well as certain limitations relating to accessibility and duration of transient copies. The Act also amends section 112 of the Copyright Act to permit storage of copyrighted material on servers in order to permit asynchronous use of material in distance education.

This legislation was reported unanimously by the Judiciary Committee, and we expect it will pass the full Senate unanimously, too. Today we will make two non-controversial changes to the legislation as passed by the Committee. First, Senator LEAHY and I have a technical amendment to the title of the bill, which corrects a non-substantive scrivener's error. Second, we are making a change in the legislative language regarding technological protection measures which makes our intention clearer by bringing the statutory language into closer conformity with our understanding of the provision. These changes are non-controversial and have the same support among the affected parties as the rest of the bill. For the information of my colleagues and those who may use the legislation, I am including a section by section analysis of the bill as amended following my comments, and asked that a copy of that section by section analysis and copies of the two amendments be published immediately following my remarks in the RECORD.

The PRESIDING OFFICER. Without objection, it is so ordered.

(See Exhibit 1).

Mr. HATCH. A few comments about the study we request from the Patent and Trademark Office included in this legislation. There was some controversy generated in some quarters over an earlier draft of the TEACH Act that directed the Undersecretary for Intellectual Property to provide the Judiciary Committee with information about technological protection measures for copyrighted works online. I must confess, I still do not entirely understand the precise objections to that formulation. One lobbyist, I believe from the Digital Media Association, was arguing that the study would lead to a rash of class action lawsuits. I have been trying to parse the language to see if this informational report

might have also provided for attorneys fees. But, fortunately, such imaginative readings of the language are no longer necessary because we were able to come to some agreement late last night on language that will allow the Committee to receive useful information for our own use and for the information of our constituents without causing interest rates to increase or the Potomac to run backwards. In all seriousness, I thank those who worked with us late into the night to forge an agreement that allows us to move forward on this last issue as part of this consensus legislation. I believe we have a bill that will be good for students, teachers, copyright owners, and information technologists.

But I would like to explain some of the thinking that went into requesting that report. First of all, the report is not designed to be a first step toward the government regulating, mandating, or favoring types of technologies or products produced to protect copyrighted works online. Second, the legislative language makes clear that we do not seek a government comparison of various products that are commercially available. We do not seek such comparisons, and we do not want the government picking winners and losers among commercial products, nor in setting the standards that would govern the development of such products.

Instead, this request is made because technological protection will be increasingly important in preventing widespread, unlawful copying of copyrighted works generally, and the Committee wishes to know as much about its capabilities as possible, for ourselves and for our constituents. This information would be extremely valuable, for example, if the Committee determines in the future that it is appropriate to facilitate the standard-setting process or to encourage the implementation of such standards in devices so that creative works can be offered to the public in a secure environment. Encryption, watermarking, and digital rights management systems have been and continue to be developed to protect copyrighted works, but these are just a portion of the possibilities that exist in making the digital environment safe for the delivery of valuable copyrighted works. If, for instance, computers and other digital devices recognized and responded to technological protection measures, a significant portion of the infringing activity that harms copyright owners could be prevented, and the Internet could be a much safer environment for the valuable and quality works that consumers want to enjoy and copyright owners want to deliver online. Therefore, the Undersecretary should include in its study so-called "bilateral" systems that have been or could be developed that would allow technology embedded in copyrighted works to communicate

with computers and other devices with regard to the level of protection required for that work, as well as unilateral protection systems. The Undersecretary should also provide us information on robust and reliable protection systems that could be renewed or upgraded after subjected to cyberhacking, as opposed to becoming useless or obsolete. Some have raised concerns that such a study would only provide a snapshot in time, or would be out of date by the time it is finished due to continual advances in technology. This may be correct. However, despite these possible limitations, the study will be extremely useful in establishing a baseline of knowledge for the Committee and our constituents with regard to what technology is or could be made available and how it is or could be implemented. Perhaps the information contained in this report could be updated by the Undersecretary to address evolving technologies in this area.

Overall, this legislation will make it easier for the teacher who connects with her students online to enhance the learning process by illustrating music appreciation principles with appropriately limited sound recordings or illustrate visual design or story-telling principles with appropriate movie clips. These wholly new interactive educational experiences, or more traditional ones now made available around the students' schedule, will be made more easily and more inexpensively by this legislation. Beyond the legislative safe harbor provided by this legislation, opportunities for students and lifetime learners of all kinds, in all kinds of locations, are limited only by the human imagination and the cooperative creativity of the creators and users of copyrighted works. The possibilities for everyone in the wired world are thrilling to contemplate.

I strongly believe that this legislation is necessary to foster and promote distance education while at the same time maintains a careful balance between copyright owners and users. Through the increasing influence of educational technologies, virtual classrooms are popping up all over the country and what we do not want to do is stand in the way of the development and advancement of innovative technologies that offer new and exciting educational opportunities. I think we all agree that digital distance should be fostered and utilized to the greatest extent possible to deliver instruction to students in ways that could have been possible a few years ago. We live at a point in time when we truly have an opportunity to help shape the future by influencing how technology is used in education so I hope my colleagues will join us in supporting this modest update of the copyright law that offers to make more readily available distance education in a digital environment to all of our students.

EXHIBIT 1.—SECTION-BY-SECTION ANALYSIS OF S. 487, THE TECHNOLOGY, EDUCATION, AND COPYRIGHT HARMONIZATION ACT

SUBSECTION (A): SHORT TITLE

This section provides that this Act may be cited as the "Technology, Education and Copyright Harmonization Act of 2001."

SUBSECTION (B): EXEMPTION OF CERTAIN PERFORMANCES AND DISPLAYS FOR EDUCATIONAL USES

Summary

Section 1(b) of the TEACH Act amends section 110(2) of the Copyright Act to encompass performances and displays of copyrighted works in digital distance education under appropriate circumstances. The section expands the scope of works to which the amended section 110(2) exemption applies to include performances of reasonable and limited portions of works other than nondramatic literary and musical works (which are currently covered by the exemption), while also limiting the amount of any work that may be displayed under the exemption to what is typically displayed in the course of a live classroom session. At the same time, section 1(b) removes the concept of the physical classroom, while maintaining and clarifying the requirement of mediated instructional activity and limiting the availability of the exemption to mediated instructional activities of governmental bodies and "accredited" non-profit educational institutions. This section of the Act also limits the amended exemption to exclude performances and displays given by means of a copy or phonorecord that is not lawfully made and acquired, which the transmitting body or institution knew or had reason to believe was not lawfully made and acquired. In addition, section 1(b) requires the transmitting institution to apply certain technological protection measures to protect against retention of the work and further downstream dissemination. The section also clarifies that participants in authorized digital distance education transmissions will not be liable for any infringement by reason of transient or temporary reproductions that may occur through the automatic technical process of a digital transmission for the purpose of a performance or display permitted under the section. Obviously, with respect to such reproductions, the distribution right would not be infringed. Throughout the Act, the term "transmission" is intended to include transmissions by digital, as well as analog means.

Works subject to the exemption and applicable portions

The TEACH Act expands the scope of the section 110(2) exemption to apply to performances and displays of all categories of copyrighted works, subject to specific exclusions for works "produced or marketed primarily for performance or display as part of mediated instructional activities transmitted via digital networks" and performance or displays "given by means of a copy or phonorecord that is not lawfully made and acquired," which the transmitting body or institution "knew or had reason to believe was not lawfully made and acquired."

Unlike the current section 110(2), which applies only to public performances of nondramatic literary or musical works, the amendment would apply to public performances of any type of work, subject to certain exclusions set forth in section 110(2), as amended. The performance of works other than nondramatic literary or musical works is limited, however, to "reasonable and limited portions" of less than the entire work. What constitutes a "reasonable and limited" por-

tion should take into account both the nature of the market for that type of work and the pedagogical purposes of the performance.

In addition, because "display" of certain types of works, such as literary works using an "e-book" reader, could substitute for traditional purchases of the work (e.g., a text book), the display exemption is limited to "an amount comparable to that which is typically displayed in the course of a live classroom setting." This limitation is a further implementation of the "mediated instructional activity" concept described below, and recognizes that a "display" may have a different meaning and impact in the digital environment than in the analog environment to which section 110(2) has previously applied. The "limited portion" formulation used in conjunction with the performance right exemption is not used in connection with the display right exemption, because, for certain works, display of the entire work could be appropriate and consistent with displays typically made in a live classroom setting (e.g., short poems or essays, or images of pictorial, graphic, or sculptural works, etc.).

The exclusion for works "produced or marketed primarily for performance or display as part of mediated instructional activities transmitted via digital networks" is intended to prevent the exemption from undermining the primary market for (and, therefore, impairing the incentive to create, modify or distribute) those materials whose primary market would otherwise fall within the scope of the exemption. The concept of "performance or display as part of mediated instructional activities" is discussed in greater detail below, in connection with the scope of the exemption. It is intended to have the same meaning and application here, so that works produced or marketed primarily for activities covered by the exemption would be excluded from the exemption. The exclusion is not intended to apply generally to all educational materials or to all materials having educational value. The exclusion is limited to materials whose primary market is "mediated instructional activities," i.e., materials performed or displayed as an integral part of the class experience, analogous to the type of performance or display that would take place in a live classroom setting. At the same time, the reference to "digital networks" is intended to limit the exclusion to materials whose primary market is the digital network environment, not instructional materials developed and marketed for use in the physical classroom.

The exclusion of performances or displays "given by means of a copy or phonorecord that is not lawfully made and acquired" under Title 17 is based on a similar exclusion in the current language of section 110(1) for the performance or display of an audiovisual work in the classroom. Unlike the provision in section 110(1), the exclusion here applies to the performance or display of any work. But, as in section 110(1), the exclusion applies only where the transmitting body or institution "knew or had reason to believe" that the copy or phonorecord was not lawfully made and acquired. As noted in the Register's Report, the purpose of the exclusion is to reduce the likelihood that an exemption intended to cover only the equivalent of traditional concepts of performance and display would result in the proliferation or exploitation of unauthorized copies. An educator would typically purchase, license, rent, make a fair use copy, or otherwise lawfully acquire the copy to be used, and works not yet made available in the market

(whether by distribution, performance or display) would, as a practical matter, be rendered ineligible for use under the exemption.

Eligible transmitting entities

As under the current section 110(2), the exemption, as amended, is limited to government bodies and non-profit educational institutions. However, due to the fact that, as the Register's Report points out, "nonprofit educational institutions" are no longer a closed and familiar group, and the ease with which anyone can transmit educational material over the Internet, the amendment would require non-profit educational institutions to be "accredited" in order to provide further assurances that the institution is a bona fide educational institution. It is not otherwise intended to alter the eligibility criteria. Nor is it intended to limit or affect any other provision of the Copyright Act that relates to non-profit educational institutions or to imply that non-accredited educational institutions are necessarily not bona fide.

"Accreditation" is defined in section 1(b)(2) of the TEACH Act in terms of the qualification of the educational institution. It is not defined in terms of particular courses or programs. Thus, an accredited nonprofit educational institution qualifies for the exemption with respect to its courses whether or not the courses are part of a degree or certificate-granting program.

Qualifying performances and displays; mediated instructional activities

Subparagraph (2)(A) of the amended exemption provides that the exemption applies to a performance or display made "by, at the direction of, or under the actual supervision of an instructor as an integral part of a class session offered as a regular part of . . . systematic mediated instructional activity." The subparagraph includes several requirements, all of which are intended to make clear that the transmission must be part of mediated instructional activity. First, the performance or display must be made by, under the direction of, or under the actual supervision of an instructor. The performance or display may be initiated by the instructor. It may also be initiated by a person enrolled in the class as long as it is done either at the direction, or under the actual supervision, of the instructor. "Actual" supervision is intended to require that the instructor is, in fact, supervising the class activities, and that supervision is not in name or theory only. It is not intended to require either constant, real-time supervision by the instructor or pre-approval by the instructor for the performance or display. Asynchronous learning, at the pace of the student, is a significant and beneficial characteristic of digital distance education, and the concept of control and supervision is not intended to limit the qualification of such asynchronous activities for this exemption.

The performance or display must also be made as an "integral part" of a class session, so it must be part of a class itself, rather than ancillary to it. Further, it must fall within the concept of "mediated instructional activities" as described in section 1(b)(2) of the TEACH Act. This latter concept is intended to require the performance or display to be analogous to the type of performance or display that would take place in a live classroom setting. Thus, although it is possible to display an entire textbook or extensive course-pack material through an e-book reader or similar device or computer application, this type of use of such materials as supplemental reading would not be

analogous to the type of display that would take place in the classroom, and therefore would not be authorized under the exemption.

The amended exemption is not intended to address other uses of copyrighted works in the course of digital distance education, including student use of supplemental or research materials in digital form, such as electronic course packs, e-reserves, and digital library resources. Such activities do not involve uses analogous to the performances and displays currently addressed in section 110(2).

The "mediated instructional activity" requirement is thus intended to prevent the exemption provided by the TEACH Act from displacing textbooks, course packs or other material in any media, copies or phonorecords of which are typically purchased or acquired by students for their independent use and retention (in most post-secondary and some elementary and secondary contexts). The Committee notes that in many secondary and elementary school contexts, such copies of such materials are not purchased or acquired directly by the students, but rather are provided for the students' independent use and possession (for the duration of the course) by the institution.

The limitation of the exemption to systematic "mediated instructional activities" in subparagraph (2)(A) of the amended exemption operates together with the exclusion in the opening clause of section 110(2) for works "produced or marketed primarily for performance or display as part of mediated instructional activities transmitted via digital networks" to place boundaries on the exemption. The former relates to the nature of the exempt activity; the latter limits the relevant materials by excluding those primarily produced or marketed for the exempt activity.

One example of the interaction of the two provisions is the application of the exemption to textbooks. Pursuant to subparagraph (2)(A), which limits the exemption to "mediated instructional activities," the display of material from a textbook that would typically be purchased by students in the local classroom environment, in lieu of purchase by the students, would not fall within the exemption. Conversely, because textbooks typically are not primarily produced or marketed for performance or display in a manner analogous to performances or display in the live classroom setting, they would not per se be excluded from the exemption under the exclusion in the opening clause. Thus, an instructor would not be precluded from using a chart or table or other short excerpt from a textbook different from the one assigned for the course, or from emphasizing such an excerpt from the assigned textbook that had been purchased by the students.

The requirement of subparagraph (2)(B), that the performance or display must be directly related and of material assistance to the teaching content of the transmission, is found in current law, and has been retained in its current form. As noted in the Register's Report, this test of relevance and materiality connects the copyrighted work to the curriculum, and it means that the portion performed or displayed may not be performed or displayed for the mere entertainment of the students, or as unrelated background material.

Limitations on receipt of transmissions

Unlike current section 110(2), the TEACH Act amendment removes the requirement that transmissions be received in classrooms

or similar places devoted to instruction unless the recipient is an officer or employee of a governmental body or is prevented by disability or special circumstances from attending a classroom or similar place of instruction. One of the great potential benefits of digital distance education is its ability to reach beyond the physical classroom, to provide quality educational experiences to all students of all income levels, in cities and rural settings, in schools and on campuses, in the workplace, at home, and at times selected by students to meet their needs.

In its place, the Act substitutes the requirement in subparagraph (2)(C) that the transmission be made solely for, and to the extent technologically feasible, the reception is limited to students officially enrolled in the course for which the transmission is made or governmental employees as part of their official duties or employment. This requirement is not intended to impose a general requirement of network security. Rather, it is intended to require only that the students or employees authorized to be recipients of the transmission should be identified, and the transmission should be technologically limited to such identified authorized recipients through systems such as password access or other similar measures.

Additional safeguards to counteract new risks

The digital transmission of works to students poses greater risks to copyright owners than transmissions through analog broadcasts. Digital technologies make possible the creation of multiple copies, and their rapid and widespread dissemination around the world. Accordingly, the TEACH Act includes several safeguards not currently present in section 110(2).

First, a transmitting body or institution seeking to invoke the exemption is required to institute policies regarding copyright and to provide information to faculty, students and relevant staff members that accurately describe and promote compliance with copyright law. Further, the transmitting organization must provide notice to recipients that materials used in connection with the course may be subject to copyright protection. These requirements are intended to promote an environment of compliance with the law, inform recipients of their responsibilities under copyright law, and decrease the likelihood of unintentional and uninformed acts of infringement.

Second, in the case of a digital transmission, the transmitting body or institution is required to apply technological measures to prevent (i) retention of the work in accessible form by recipients to which it sends the work for longer than the class session, and (ii) unauthorized further dissemination of the work in accessible form by such recipients. Measures intended to limit access to authorized recipients of transmissions from the transmitting body or institution are not addressed in this subparagraph (2)(D). Rather, they are the subjects of subparagraph (2)(C).

The requirement that technological measures be applied to limit retention for no longer than the "class session" refers back to the requirement that the performance be made as an "integral part of a class session." The duration of a "class session" in asynchronous distance education would generally be that period during which a student is logged on to the server of the institution or governmental body making the display or performance, but is likely to vary with the needs of the student and with the design of the particular course. It does not mean the duration of a particular course (i.e., a semester or term), but rather is intended to describe the equivalent of an actual single

face-to-face mediated class session (although it may be asynchronous and one student may remain online or retain access to the performance or display for longer than another student as needed to complete the class session). Although flexibility is necessary to accomplish the pedagogical goals of distance education, the Committee expects that a common sense construction will be applied so that a copy or phonorecord displayed or performed in the course of a distance education program would not remain in the possession of the recipient in a way that could substitute for acquisition or for uses other than use in the particular class session. Conversely, the technological protection measure in subparagraph (2)(D)(ii) refers only to retention of a copy or phonorecord in the computer of the recipient of a transmission. The material to be performed or displayed may, under the amendments made by the Act to section 112 and with certain limitations set forth therein, remain on the server of the institution or government body for the duration of its use in one or more courses, and may be accessed by a student each time the student logs on to participate in the particular class session of the course in which the display or performance is made. The reference to "accessible form" recognizes that certain technological protection measures that could be used to comply with subparagraph (2)(D)(ii) do not cause the destruction or prevent the making of a digital file; rather they work by encrypting the work and limiting access to the keys and the period in which such file may be accessed. On the other hand, an encrypted file would still be considered to be in "accessible form" if the body or institution provides the recipient with a key for use beyond the class session.

Paragraph (2)(D)(ii) provides, as a condition of eligibility for the exemption, that a transmitting body or institution apply technological measures that reasonably prevent both retention of the work in accessible form for longer than the class session and further dissemination of the work. This requirement does not impose a duty to guarantee that retention and further dissemination will never occur. Nor does it imply that there is an obligation to monitor recipient conduct. Moreover, the "reasonably prevent" standard should not be construed to imply perfect efficacy in stopping retention or further dissemination. The obligation to "reasonably prevent" contemplates an objectively reasonable standard regarding the ability of a technological protection measure to achieve its purpose. Examples of technological protection measures that exist today and would reasonably prevent retention and further dissemination, include measures used in connection with streaming to prevent the copying of streamed material, such as the Real Player "Secret Handshake/Copy Switch" technology discussed *Real Networks v. Streambox*, 2000 WL 127311 (Jan. 18, 2000) or digital rights management systems that limit access to or use of encrypted material downloaded onto a computer. It is not the Committee's intent, by noting the existence of the foregoing, to specify the use of any particular technology to comply with subparagraph (2)(D)(ii). Other technologies will certainly evolve. Further, it is possible that, as time passes, a technological protection measure may cease to reasonably prevent retention of the work in accessible form for longer than the class session and further dissemination of the work, either due to the evolution of technology or to the widespread availability of a hack that can be readily

used by the public. In those cases, a transmitting organization would be required to apply a different measure.

Nothing in section 110(2) should be construed to affect the application or interpretation of section 1201. Conversely, nothing in section 1201 should be construed to affect the application or interpretation of section 110(2).

Transient and temporary copies

Section 1(b)(2) of the TEACH Act implements the Register's recommendation that liability not be imposed upon those who participate in digitally transmitted performances and displays authorized under this subsection by reason of copies or phonorecords made through the automatic technical process of such transmission, or any distribution resulting therefrom. Certain modifications have been made to the Register's recommendations to accommodate instances where the recommendation was either too broad or not sufficiently broad to cover the appropriate activities.

The third paragraph added to the amended exemption under section 1(b)(2) of the TEACH Act recognizes that transmitting organizations should not be responsible for copies or phonorecords made by third parties, beyond the control of the transmitting organization. However, consistent with the Register's concern that the exemption should not be transformed into a mechanism for obtaining copies, the paragraph also requires that such transient or temporary copies stored on the system or network controlled or operated by the transmitting body or institution shall not be maintained on such system or network "in a manner ordinarily accessible to anyone other than anticipated recipients" or "in a manner ordinarily accessible to such anticipated recipients for a longer period than is reasonably necessary to facilitate the transmissions" for which they are made.

The liability of intermediary service providers remains governed by section 512, but, subject to section 512(d) and section 512(e), section 512 will not affect the legal obligations of a transmitting body or institution when it selects material to be used in teaching a course, and determines how it will be used and to whom it will be transmitted as a provider of content.

The paragraph refers to "transient" and "temporary" copies consistent with the terminology used in section 512, including transient copies made in the transmission path by conduits and temporary copies, such as caches, made by the originating institution, by service providers or by recipients. Organizations providing digital distance education will, in many cases, provide material from source servers that create additional temporary or transient copies or phonorecords of the material in storage known as "caches" in other servers in order to facilitate the transmission. In addition, transient or temporary copies or phonorecords may occur in the transmission stream, or in the computer of the recipient of the transmission. Thus, by way of example, where content is protected by a digital rights management system, the recipient's browser may create a cache copy of an encrypted file on the recipient's hard disk, and another copy may be created in the recipient's random access memory at the time the content is perceived. The third paragraph added to the amended exemption by section 1(b)(2) of the TEACH Act is intended to make clear that those authorized to participate in digitally transmitted performances and displays as authorized under section 110(2) are not liable for infringement

as a result of such copies created as part of the automatic technical process of the transmission if the requirements of that language are met. The paragraph is not intended to create any implication that such participants would be liable for copyright infringement in the absence of the paragraph.

SUBSECTION (C): EPHEMERAL RECORDINGS

One way in which digitally transmitted distance education will expand America's educational capacity and effectiveness is through the use of asynchronous education, where students can take a class when it is convenient for them, not at a specific hour designated by the body or institution. This benefit is likely to be particularly valuable for working adults. Asynchronous education also has the benefit of proceeding at the student's own pace, and freeing the instructor from the obligation to be in the classroom or on call at all hours of the day or night.

In order for asynchronous distance education to proceed, organizations providing distance education transmissions must be able to load material that will be displayed or performed on their servers, for transmission at the request of students. The TEACH Act's amendment to section 112 makes that possible.

Under new subsection 112(f)(1), transmitting organizations authorized to transmit performances or displays under section 110(2) may load on their servers copies or phonorecords of the performance or display authorized to be transmitted under section 110(2) to be used for making such transmissions. The subsection recognizes that it often is necessary to make more than one ephemeral recording in order to efficiently carry out digital transmissions, and authorizes the making of such copies or phonorecords.

Subsection 112(f) imposes several limitations on the authorized ephemeral recordings. First, they may be retained and used solely by the government body or educational institution that made them. No further copies or phonorecords may be made from them, except for copies or phonorecords that are authorized by subsection 110(2), such as the copies that fall within the scope of the third paragraph added to the amended exemption under section 1(b)(2) of the TEACH Act. The authorized ephemeral recordings must be used solely for transmissions authorized under section 110(2).

The Register's Report notes the sensitivity of copyright owners to the digitization of works that have not been digitized by the copyright owner. As a general matter, subsection 112(f) requires the use of works that are already in digital form. However, the Committee recognizes that some works may not be available for use in distance education, either because no digital version of the work is available to the institution, or because available digital versions are subject to technological protection measures that prevent their use for the performances and displays authorized by section 110(2). In those circumstances where no digital version is available to the institution or the digital version that is available is subject to technological measures that prevent its use for distance education under the exemption, section 112(f)(2) authorizes the conversion from an analog version, but only conversion of the portion or amount of such works that are authorized to be performed or displayed under section 110(2). It should be emphasized that subsection 112(f)(2) does not provide any authorization to convert print or other analog versions of works into digital format except as permitted in section 112(f)(2).

Relationship to fair use and contractual obligations

As the Register's Report makes clear "critical to [its conclusion and recommendations] is the continued availability of the fair use doctrine." Nothing in this Act is intended to limit or otherwise to alter the scope of the fair use doctrine. As the Register's Report explains: "Fair use is a critical part of the distance education landscape. Not only instructional performances and displays, but also other educational uses of works, such as the provision of supplementary materials or student downloading of course materials, will continue to be subject to the fair use doctrine. Fair use could apply as well to instructional transmissions not covered by the changes to section 110(2) recommended above. Thus, for example, the performance of more than a limited portion of a dramatic work in a distance education program might qualify as fair use in appropriate circumstances."

The Register's Report also recommends that the legislative history of legislation implementing its distance education requirements make certain points about fair use. Specifically, this legislation is enacted in recognition of the following: (a) The fair use doctrine is technologically neutral and applies to activities in the digital environment; and (b) the lack of established guidelines for any particular type of use does not mean that fair use is inapplicable.

While the Register's Report also examined and discussed a variety of licensing issues with respect to educational uses not covered by exemptions or fair use, these issues were not included in the Report's legislative recommendations that formed the basis for the TEACH Act. It is the view of the Committee that nothing in this Act is intended to affect in any way the relationship between express copyright exemptions and license restrictions.

Nonapplicability to secure tests

The Committee is aware and deeply concerned about the phenomenon of school officials who are entrusted with copies of secure test forms solely for use in actual test administrations and using those forms for a completely unauthorized purpose, namely helping students to study the very questions they will be asked on the real test. The Committee does not in any way intend to change current law with respect to application of the Copyright Act or to undermine or lessen in any way the protection afforded to secure tests under the Copyright Act. Specifically, this section would not authorize a secure test acquired solely for use in an actual test administration to be used for any other purpose.

SUBSECTION (D): PTO REPORT

The report requested in subsection (d) requests information about technological protection systems to protect digitized copyrighted works and prevent infringement. The report is intended for the information of Congress and shall not be construed to have any effect whatsoever on the meaning, applicability, or effect of any provision of the Copyright Act in general or the TEACH Act in particular.

Mrs. FEINSTEIN. Madam President, today I rise in strong support of S. 487, the Technology, Education, and Copyright Harmonization, TEACH, Act. This Act expands the distance learning exemption in our copyright law, acknowledging that changes in technology sometimes require changes in

the law. In making this change, the TEACH Act places new limits on the rights of copyright owners. These limits, however, are established in such a way that they will benefit non-profit educational institutions and their students, but hopefully without exposing copyrighted works to any further unauthorized use.

The drafters of the Constitution acknowledged the importance of creative works—and recognized the property rights of the creators of those works—in the very text of the Constitution itself. The Copyright Clause of the Constitution, in protecting the rights of American creators everywhere, has directly translated into the most innovative environment for the creation of creative works we've ever seen. This creativity benefits consumers and our economy as a whole.

Never in our history have we seen such a plethora of choices in books, movies, television, software, and music. One look at the statistics demonstrates the staggering importance copyrighted works have to the well-being of not only my home state of California, but also the economy of the entire Nation.

It has been reported that the copyright industries are creating jobs at three times the rate of the rest of the economy. These industries have a surplus balance of trade with every single country in the world, and that last year they accounted for 5 percent of the U.S. Gross Domestic Product. Few other industries can boast of such a successful record, and the protection we grant to copyrighted works is directly responsible for that success.

The message is clear. Striking the appropriate balance in copyright protection is vital to maintaining consumer choice, and in maintaining this vibrant part of the American economy. Sufficient protection means the continue investment in the production of creative works, which results in greater choices for consumers.

Insufficient protection of copyrighted works, on the other hand, will negatively affect the ability and desire of creators and lawful distributors of such works to make the necessary investment of time, money and other resources to continue to create and offer quality works to the public.

That is why we must carefully consider any degradation of that protection, even when proposed limitations would benefit other important segments of our society, such as the educational community.

I believe that this legislation strikes the appropriate balance by allowing accredited, nonprofit educational institutions to make certain uses of copyrighted works, but requiring them to technologically protect those works to prevent unauthorized uses by others.

The application of appropriate technological protection to copyrighted

works is increasingly important as we move from the analog to the digital world. Technological protection will facilitate the availability of copyrighted works in high-quality, digital formats and in global, networked environments.

That is why the provisions of this legislation directing the Undersecretary of Commerce for Intellectual Property to look at what protective technologies are out there will be of great importance to this Committee in the near future as the online environment and the world of e-commerce develops.

Questions such as whether unilateral protection applied to works by copyright owners will provide a sufficiently secure environment or whether bilateral technologies—which invoke a "handshake" of sorts between the work and the machine used to access the work—should be examined more closely have yet to be answered.

This study should help us give us an invaluable resource with regard to renewable, ungradeable, and robust forms of protection that will allow valuable copyrighted works to move freely and securely through the digital environment.

AMENDMENT NO. 793

Mr. REID. Madam President, Senators HATCH and LEAHY have an amendment at the desk, and I ask for its consideration.

The PRESIDING OFFICER. The clerk will report the amendment.

The legislative clerk read as follows:

The Senator from Nevada [Mr. REID], for Mr. HATCH, for himself and Mr. LEAHY, proposes an amendment numbered 793.

Mr. REID. I ask unanimous consent reading of the amendment be dispensed with.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment is as follows:

(Purpose: To clarify the application of certain technological measures)

On page 9, lines 14 and 15 strike "in the ordinary course of their operations," and insert "reasonably".

Mr. REID. Madam President, I ask unanimous consent that the amendment be agreed to.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendment (No. 793) was agreed to.

Mr. REID. Madam President, I ask unanimous consent the committee substitute amendment, as amended, be agreed to, the bill be read a third time and passed, an amendment at the desk to the title be agreed to, the motion to reconsider be laid upon the table, and that any statements relating to the bill be printed in the RECORD.

The PRESIDING OFFICER. Without objection, it is so ordered.

The committee amendment in the nature of a substitute, as amended, was agreed to.

The bill (S. 487), as amended, was read the third time and passed.

The amendment (No. 794) was agreed to, as follows:

(Purpose: To amend the title)

Amend the title so as to read: "A bill to amend chapter 1 of title 17, United States Code, relating to the exemption of certain performances or displays for educational uses from copyright infringement provisions, to provide that the making of copies or phonorecords of such performances or displays is not an infringement under certain circumstances, and for other purposes."

MEASURES READ THE FIRST TIME—H.R. 503 AND H.R. 1885

Mr. REID. Madam President, I understand the following bills are at the desk: H.R. 503 and H.R. 1885. That being the case, I ask unanimous consent that the bills be considered as having been read the first time. Further, I ask unanimous consent that there be an objection to the requests for their second reading, en bloc.

The PRESIDING OFFICER. Without objection, it is so ordered.

Under the rule, the bills will be read for the second time on the next legislative day.

ORDERS FOR FRIDAY, JUNE 8, 2001

Mr. REID. Madam President, I ask unanimous consent that when the Sen-

ate completes its business today, it adjourn until the hour of 10:30 a.m., on Friday, June 8. I further ask consent that on Friday, immediately following the prayer and the pledge, the Journal of proceedings be approved to date, the morning hour be deemed expired, the time for the two leaders be reserved for their use later in the day, and the Senate proceed to a period of morning business, with Senators permitted to speak for up to 10 minutes each.

The PRESIDING OFFICER. Without objection, it is so ordered.

PROGRAM

Mr. REID. Madam President, as has been previously announced by our leader, Senator DASCHLE, there will be no rollcall votes on Friday. And as he has also previously stated, the next rollcall votes will occur on Monday at 5:15 p.m. I do say to everyone, again, within the sound of my voice that we did a pretty good job today of adhering to the 20-minute rule. We certainly did not adhere to it completely, but we were quite close. We are going to continue next week until people are in the habit of voting within 20 minutes.

ADJOURNMENT UNTIL 10:30 A.M. TOMORROW

Mr. REID. Madam President, if there is no further business to come before

the Senate, I now ask unanimous consent that the Senate stand in adjournment under the previous order.

There being no objection, the Senate, at 5:57 p.m., adjourned until Friday, June 8, 2001, at 10:30 a.m.

NOMINATIONS

Executive nominations received by the Senate June 7, 2001:

DEPARTMENT OF DEFENSE

STEVEN JOHN MORELLO, SR., OF MICHIGAN, TO BE GENERAL COUNSEL OF THE DEPARTMENT OF THE ARMY, VICE CHARLES A. BLANCHARD, RESIGNED.

WILLIAM A. NAVAS, JR., OF VIRGINIA, TO BE AN ASSISTANT SECRETARY OF THE NAVY, VICE CAROLYN H. BECRAFT.

DEPARTMENT OF THE TREASURY

SHEILA C. BAIR, OF KANSAS, TO BE AN ASSISTANT SECRETARY OF THE TREASURY, VICE GREGORY A. BAER, RESIGNED.

DEPARTMENT OF TRANSPORTATION

ELLEN G. ENGLEMAN, OF INDIANA, TO BE ADMINISTRATOR OF THE RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION, DEPARTMENT OF TRANSPORTATION, VICE KELLEY S. COYNER, RESIGNED.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

ALEX AZAR II, OF MARYLAND, TO BE GENERAL COUNSEL OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES, VICE HARRIET S. RABB, RESIGNED.

DEPARTMENT OF STATE

CLARK T. RANDT, JR., OF CONNECTICUT, TO BE AMBASSADOR EXTRAORDINARY AND PLENIPOTENTIARY OF THE UNITED STATES OF AMERICA TO THE PEOPLE'S REPUBLIC OF CHINA.

C. DAVID WELCH, OF VIRGINIA, A CAREER MEMBER OF THE SENIOR FOREIGN SERVICE, CLASS OF MINISTER—COUNSELOR, TO BE AMBASSADOR EXTRAORDINARY AND PLENIPOTENTIARY OF THE UNITED STATES OF AMERICA TO THE ARAB REPUBLIC OF EGYPT.